

What is claimed is:

1. A polymeric electroluminescent device comprising:
an emitting layer, which includes at least metal nanoparticles and a luminescent polymer;
a cathode layer disposed on one side of the emitting layer; and
an anode layer disposed on the other side of the emitting layer.
2. The polymeric electroluminescent device of Claim 1, wherein upon application of a bias voltage across the anode and cathode layers, holes and electrons are injected respectively from the anode and cathode layers to the emitting layer.
3. The polymeric electroluminescent device of Claim 1, wherein the metal nanoparticle is one selected from a group of Au, Ag, Pt, Ni, Fe, Co and Ge.
4. The polymeric electroluminescent device of Claim 1, wherein the luminescent polymer generates light with a wavelength between 400 and 800 nm.
5. The polymeric electroluminescent device of Claim 4, wherein the luminescent polymer is one selected from a group of poly(dihexylfluorene), poly(phenylenevinylene) and poly(dioctylfluorene).
6. The polymeric electroluminescent device of Claim 5, wherein the metal nanoparticles are 1 to 100 nm in size and mixed with the luminescent polymer at a volume

fraction of 1×10^{-9} to 0.1.

7. The polymeric electroluminescent device of Claim 6, wherein the metal nanoparticles are gold nanoparticles and the luminescent polymer is poly(dioctylfluorene).

8. The polymeric electroluminescent device of Claim 7, wherein the gold nanoparticles are 5 to 10 nm in size.

9. The polymeric electroluminescent device of Claim 1, wherein the emitting layer includes metal nanoparticles, which are formed by coating the surface of inorganic particles or polymeric particles with a metal, and a luminescent polymer, at a volume fraction of 1×10^{-9} to 0.1.